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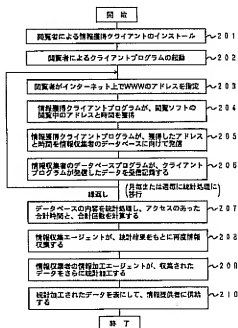
(54) 【発明の名称】 インターネット上の情報収集方法、記憶媒体、および情報収集システム

(57) 【要約】

【課題】 情報閲覧者の活動状況の統計処理結果に基づいて詳細情報を自動で収集し、これを情報提供者に供給し、情報提供者がWWW、電子メールなどの閲覧情報の改善などに役立て可能なインターネット上の情報収集技術を提供する。

【解決手段】 インターネット上に情報提供者のサーバーと、情報閲覧者のクライアントと、情報収集者のサーバーとが接続されるネットワークシステムであって、ステップ201～210に従い、情報閲覧者が情報提供者のWWWを閲覧する際に情報獲得クライアントプログラムをインストールして起動した際に、情報閲覧者が閲覧したWWWのURL、時間の閲覧情報を情報収集者のサーバーに獲得し、この獲得された閲覧情報をアクセス時間別、アクセス回数別、性別、年齢層別、地域別に統計処理し、この統計処理された結果に基づいてインターネット上の詳細情報を情報収集者のサーバーに自動的に獲得するものである。

図 2



アントプログラムをインストールして起動した際に、前記閲覧情報を獲得する手段により閲覧情報を獲得して前記閲覧情報を保存する手段に保存し、この閲覧情報の統計処理結果に基づいて前記インターネット上の詳細情報を前記詳細情報を獲得する手段により自動的に獲得することを特徴とするインターネット上の情報収集システム。

【請求項9】 複数の情報提供者のサーバーと複数の情報閲覧者のクライアントとが接続されるインターネット上において、前記複数の情報閲覧者が前記複数の情報提供者の電子メール、メーリングリスト、ニュースグループを閲覧した活動状況に基づいて情報を獲得する情報収集システムであって、前記情報閲覧者が閲覧した前記情報提供者の電子メール、メーリングリスト、ニュースグループのタイトル、差出人、日時、時間の閲覧情報を獲得する手段と、この獲得された閲覧情報を保存する手段と、この保存された閲覧情報の閲覧時間別、閲覧回数別、性別、年齢層別、地域別の統計処理結果に基づいて前記インターネット上の詳細情報を獲得する手段とを有する情報収集者のサーバーを前記インターネットに接続し、前記情報閲覧者のいずれかが前記情報提供者のいずれかの電子メール、メーリングリスト、ニュースグループを閲覧するために情報獲得クライアントプログラムをインストールして起動した際に、前記閲覧情報を獲得する手段により閲覧情報を獲得して前記閲覧情報を保存する手段に保存し、この閲覧情報の統計処理結果に基づいて前記インターネット上の詳細情報を前記詳細情報を獲得する手段により自動的に獲得することを特徴とするインターネット上の情報収集システム。

#### 【発明の詳細な説明】

##### 【0001】

【発明の属する技術分野】本発明は、インターネット上の情報収集技術に関し、特に情報閲覧者が情報提供者のWWW(World Wide Web)、電子メール、メーリングリスト、ニュースグループなどを閲覧する際にオリジナルの情報獲得クライアントプログラムをインストールして起動した際に、この情報閲覧者の活動状況に基づいたインターネット上の詳細情報の収集に好適なインターネット上の情報収集方法、記憶媒体、および情報収集システムに適用して有効な技術に関する。

##### 【0002】

【従来の技術】たとえば、発明者が検討した技術として、コンピュータネットワークによるインターネットにおいては、このインターネット上に複数の情報提供者のサーバーと複数の情報閲覧者のクライアントとが接続され、情報閲覧者が所望とする情報提供者のWWWのアドレスに相当するURL(Uniform Resource Locator)を指定することにより、この情報提供者のWWWを閲覧することができる情報提供サービスや、さらに電子メール、ニュースグループなどのサービスが考えられ、この

ようなサービスが利用できるインターネットはマルチメディア通信として種々の利用形態で用いられている。

##### 【0003】

【発明が解決しようとする課題】ところで、前記のようなインターネット上における情報提供サービスに関する技術において、情報閲覧者はURLを指定することによって所望する情報提供者のWWWを閲覧することができるものの、その一方で情報提供者側においては、情報閲覧者によるアクセス状況が気になることであり、このアクセス回数や、これに基づいた詳細情報などを収集する技術などが情報提供者の間から望まれている。

【0004】たとえば、近年、インターネットの視聴率調査として、情報閲覧者によるホームページのクリック数を計数する方法や、アンケートによるマーケットリサーチ方法などが考えられており、前者はどのページを何回クリックされているかということに基づいた調査であり、また後者は印象に残ったページや会社などをアンケートにより調べるものであり、いずれも詳細な情報までは導き出せない状況となっている。

【0005】そこで、本発明者は、インターネット上でブラウザを使用してWWWを閲覧している情報閲覧者のインターネット上で活動状況を記録することに着目し、この記録された全データを統計処理した後、さらに統計結果に基づいてインターネット上の情報を収集するために、自動で閲覧したURLを送信する方法をソフトウェアにより可能となることを見出した。

【0006】すなわち、自動で閲覧したURLを送信するオリジナルのプログラムを考え、このプログラムを起動させることで、住所、年齢、性別が分かた上で、実際にどのページをたどって、何分間、どのページを眺めたかという統計による調査を行い、さらにアンケートでは知ることができなかった印象に残らないページなど、クリック数計数方法やアンケートによるマーケットリサーチ方法では得られない詳細情報を導き出すことを可能としたものである。

【0007】そこで、本発明の目的は、情報閲覧者がオリジナルの情報獲得クライアントプログラムをインストールして起動した際に、この情報閲覧者の活動状況の統計処理結果に基づいてインターネット上の詳細情報を自動で収集することができるインターネット上の情報収集方法、記憶媒体、および情報収集システムを提供することにある。

【0008】さらに、これらの統計処理結果と収集した詳細情報とを該当する情報提供者に供給し、情報提供者がWWWの閲覧情報の改善などに役立てることができるインターネット上の情報収集技術を提供することができる。

【0009】また、WWWのプル型情報の他に、電子メール、メーリングリストなどのプッシュ型情報、ニュースグループなどの情報についても、同様に統計処理結果

た際に、情報閲覧者が閲覧した電子メール、メーリングリスト、ニュースグループのタイトル、差出人、日時、時間の閲覧情報を情報収集者のサーバーに獲得し、この獲得された閲覧情報を閲覧時間別、閲覧回数別、性別、年齢層別、地域別に統計処理し、この統計処理された結果に基づいてインターネット上の詳細情報を情報収集者のサーバーに自動的に獲得するものである。

【0021】これにより、ホームページのWWWのアドレス情報の他に、電子メール、メーリングリストなどのアドレス型情報、ニュースグループなどの情報についても、同様に統計処理結果に基づいてインターネット上の詳細情報を自動で収集することができ、さらに情報提供者の閲覧情報の改善などに役立てることができる。

【0022】

【発明の実施の形態】以下、本発明の実施の形態を図面に基いて詳細に説明する。

【0023】（実施の形態1）図1は本発明の一実施の形態であるインターネット上のネットワークシステムを示す概略構成図、図2は情報獲得クライアントプログラムによる処理手順の一例を示すフローチャート、図3はデータベースの内容の一例を示す説明図、図4～図7はそれぞれ報告書に添付する統計結果などの一例を示す説明図である。

【0024】まず、図1により本実施の形態のインターネット上のネットワークシステムの概略構成を説明する。

【0025】本実施の形態のインターネット上のネットワークシステムは、たとえばインターネット上に接続される、複数の情報提供者のサーバー1と、複数の情報閲覧者のクライアント2と、情報収集者のサーバー3とから構成されている。なお、図1においては、ネットワークシステムの簡略化のために、それぞれ1つずつの情報提供者のサーバー1、情報閲覧者のクライアント2が接続されている例を示している。

【0026】情報提供者のサーバー1は、インターネット上でWWWの形で情報閲覧者の要求に応じて情報を提供するコンピュータからなり、情報収集者から閲覧情報の情報獲得クライアントのライセンスを受け、これを自社のWWW上に登録するか、あるいは情報獲得クライアントの存在するその他のホームページにリンクを貼って、情報閲覧者に対して情報獲得クライアントのインストールを可能にするとともに、情報獲得クライアントソフトウェアに基づいた閲覧情報の獲得からの処理を可能としている。

【0027】情報閲覧者のクライアント2は、インターネット上でWWWに接続されており、WWW閲覧ソフトウェアを保持しているコンピュータからなり、情報提供者のWWWに対応するURLの指定によって情報提供者のWWWを閲覧することが可能となっている。

【0028】情報収集者のサーバー3は、情報閲覧者が

閲覧した情報提供者のWWWのURL、時間の閲覧情報を獲得して保存するデータベースと、この閲覧情報のアクセス時間別、アクセス回数別、性別、年齢層別、地域別の統計処理結果に基づいて新たにインターネット上の詳細情報を獲得するとともに、これらの情報を情報提供者に供給するために所定の形式に加工するエージェントプログラムとを有するコンピュータからなり、情報提供者のサーバー1、情報閲覧者のクライアント2とともにインターネット上に接続されている。

【0029】以上のように構成されるネットワークシステムにおいては、インターネットに接続される情報収集者のサーバー3と、情報収集者から情報提供者に対してライセンスで貸与される情報獲得クライアントのソフトウェア、すなわち情報獲得クライアントプログラムが記憶された記憶媒体4とからインターネット上の情報収集システムが構成される。

【0030】次に、本実施の形態の作用について、インターネット上の情報収集方法の処理手順を図2に基づいて説明する。

【0031】この場合に、情報収集者からライセンスを受け、たとえばCD-ROMなどの記憶媒体4に格納されている情報獲得クライアントプログラムは予め情報提供者のサーバー1に書き込まれているものとする。なお、この情報獲得クライアントプログラムは情報収集者のオリジナルのプログラムであり、この情報獲得クライアントプログラムにはインターネット上の情報収集を自動で行う処理手順が記憶されている。

【0032】(1).ステップ201において、情報閲覧者は、情報提供者のサーバー1に書き込まれている情報獲得クライアントプログラムを自分のコンピュータにインストールする。この場合に、情報獲得クライアントプログラムは、インターネット上を情報提供者のサーバー1から自動で送信されてくる。

【0033】なお、この情報獲得クライアントプログラムは情報提供者のサーバー1に書き込まれることも可能で、この場合には情報収集者のサーバー3から受信することも可能である。この情報獲得クライアントプログラムインストールは、意識的あるいは無意識的に自動で行うことができる。

【0034】(2).ステップ202において、情報閲覧者は、情報獲得クライアントプログラムを起動する。この場合には、たとえば意識的にプログラムを起動させたり、あるいはこのページを見ると自動で情報獲得クライアントプログラムが受信され、起動される、いわゆるPOS (Point Of Start) ページを閲覧するのみで無意識的に自動で起動することなども可能である。

【0035】(3).ステップ203において、情報閲覧者は、インターネット上で所望とする情報提供者のWWWのアドレスを指定する。このWWWのアドレスは、一般

【0049】たとえば、2. 統計の資料の一例として、総合ランクによる合計アクセス時間による順位と総合ランクによる合計アクセス回数による順位(図4(a),(b))、18歳未満、18歳～25歳、26歳～35歳、36歳～49歳、50歳～60歳、60歳以上などの年齢別ランクによる合計アクセス回数と時間の上位3位(図5)、男性、女性の性別ランクによる合計アクセス回数と時間の上位3位(図6)などを、それぞれ表形式にまとめる。その他に、地域別ランクによる合計アクセス回数と時間なども資料として報告することができる。

【0050】さらに、3. 競合サイトの紹介を対象としたメニューページおよび全体の比較分析の資料の一例として、たとえば図7に示すように、ページ数、リンク数、単語数、グラフィック数、グラフィック面積率、イメージマップ数、イメージマップ面積率、AVI、ウェブファイル数、バックグラウンドの色などの詳細情報に関して、貴社メニューページ、他社メニューページ、貴社サイト全体、他社サイト全体などについての比較分析を報告する。

【0051】そして、以上のような、1. 概要、2. 統計、3. 競合サイトの紹介の項目についての内容に基づいて、4. 今後の結果と提議案として、1. 前月より改善された点、2. 今月の問題点、3. より良いサイトのための提議案などを情報収集者から情報提供者に対して提案することができる。

【0052】以上のように、情報獲得クライアントプログラムの処理手順に基づいて、情報閲覧者が閲覧したWWWのURL、時間の閲覧情報を情報収集者のデータベースに獲得し、この獲得された閲覧情報をアクセス時間別、アクセス回数別、性別、年齢別、地域別に統計処理し、この統計処理された結果に基づいてインターネット上の詳細情報を情報収集者のデータベースに自動で獲得することができる。

【0053】よって、この情報獲得クライアントプログラムによる情報の自動獲得によって、より隔りのない閲覧情報を、より詳細に入手することができ、また自社のホームページを評価するにあたって、自社のページにアクセスした人が、他のどの会社のページをどれほどアクセスしたかなどの詳細な情報が分かるようになる。

【0054】以上により、より具体的に、誰がどのページをどのくらい閲覧したか、情報提供者のインターネット上の競争相手はどの会社で、競争相手のホームページと比べて有利か不利か、ホームページのどこが問題でどこが長所か、より効率的なホームページにするにはどうしたらよいかなど、ホームページを開発している情報提供者にとって、より詳細な情報まで知ることが可能となる。

【0055】従って、本実施の形態のインターネット上のネットワークシステムによれば、インターネット上に情報提供者のサーバー1と情報閲覧者のクライアント2

とに加えて情報収集者のサーバー3を接続し、記憶媒体4に記憶されているオリジナルの情報獲得クライアントプログラムを情報提供者のサーバー1または情報収集者のサーバー3に書き込むだけで、情報閲覧者が情報提供者のWWWを閲覧する際に情報獲得クライアントプログラムをインストールして起動した際に、閲覧情報を獲得して保存し、この閲覧情報の統計処理結果に基づいてインターネット上の詳細情報を自動的に獲得することができる。

【0056】そして、これらの詳細情報を所定の形式に統計加工して報告書として情報提供者に供給することで、情報提供者は報告書でWWWの閲覧情報の改善などに役立て、情報閲覧者によるアクセス時間、アクセス回数を増やすようにするため、より良い構成および内容にWWWの閲覧情報を改善することができる。

【0057】(実施の形態2) 図8は本発明の他の実施の形態であるインターネット上のネットワークシステムにおいて、情報獲得クライアントプログラムによる処理手順の一例を示すフローチャート、図9はデータベースの内容の一例を示す説明図、図10～図12はそれぞれ報告書に添付する統計結果などの一例を示す説明図である。

【0058】本実施の形態のインターネット上のネットワークシステムは、前記実施の形態1と同様にインターネット上に接続される、複数の情報提供者のサーバー1と、複数の情報閲覧者のクライアント2と、情報収集者のサーバー3とから構成され、前記実施の形態1との相違点は、情報提供者の情報をWWWなどのプル型情報に代えて、電子メール、メーリングリストなどのプッシュ型情報、ニュースグループなどの情報に適用するようにした点である。

【0059】すなわち、本実施の形態においては、情報閲覧者が情報提供者の電子メール、メーリングリスト、ニュースグループなどを閲覧するために情報獲得クライアントプログラムをインストールして起動した際に、情報閲覧者が閲覧したこれらの情報のタイトル、差出人、日時、時間などを情報収集者のサーバーに獲得し、この獲得された閲覧情報を閲覧時間別、閲覧回数別、性別、年齢別、地域別などに統計処理し、この統計処理された結果に基づいてインターネット上の詳細情報を情報収集者のサーバー1に自動的に獲得するものである。

【0060】次に、本実施の形態の作用について、インターネット上の情報収集方法の処理手順を図8に基づいて説明する。なお、前記実施の形態1(図2)の処理手順と同様のステップについては詳細な説明は省略する。

【0061】(1). 前記実施の形態1と同様に、ステップ801において、情報閲覧者は、情報提供者のサーバー1に書き込まれている情報獲得クライアントプログラムを自分のコンピュータにインストールする。

【0062】(2). 前記実施の形態1と同様に、ステップ

電子メール、メーリングリスト、ニュースグループなどを評価するにあたって、自社のブッシュ型の情報を閲覧した人が、他のどの会社の情報をどれだけ閲覧したかなどの詳細な情報が分かるようになる。

【0078】以上により、より具体的に、誰がどの情報をどのくらい閲覧したか、情報提供者のインターネット上の競争相手はどの会社で、競争相手の情報と比べて有利か不利か、情報のどこが問題でどこが長所か、より効率的な情報にするにはどうしたらよいかなど、情報を開設している情報提供者にとって、より詳細な情報まで知ることが可能となる。

【0079】従って、本実施の形態のインターネット上のネットワークシステムによれば、インターネット上に情報提供者のサーバー1と情報閲覧者のクライアント2に加えて情報収集者のサーバー3を接続し、記憶媒体4に記憶されているオリジナルの情報獲得クライアントプログラムを情報提供者のサーバー1または情報収集者のサーバー3に書き込むだけで、情報閲覧者が情報提供者の電子メール、メーリングリスト、ニュースグループなどを閲覧する際に情報獲得クライアントプログラムをインストールして起動した際に、閲覧情報を獲得して保存し、この閲覧情報の統計処理結果に基づいてインターネット上の詳細情報を自動的に獲得することができる。

【0080】そして、これらの詳細情報を所定の形式に統計加工して報告書として情報提供者に供給することで、情報提供者は報告書を電子メール、メーリングリスト、ニュースグループなどの閲覧情報の改善などに役立て、情報閲覧者による閲覧時間、閲覧回数を増やすようにするため、より良い構成および内容に閲覧情報を改善することができる。

【0081】以上、本発明者によってなされた発明を発明の実施の形態1および2に基づき具体的に説明したが、本発明は前記実施の形態に限定されるものではなく、その要旨を逸脱しない範囲で種々変更可能であることはいうまでもない。

【0082】たとえば、統計処理結果をもとに収集する詳細情報については、前記に示した情報に限定されるものではなく、この他にもページのサイズ、グラフィックのサイズ、グラフィックの位置、グラフィックの大きさ、グラフ数、リンク数（同社サイト内）、リンク数（同社サイト外）などについても広く適用でき、これらの詳細情報は情報提供者の要求などに応じて必要な種々の情報を獲得することが可能である。

【0083】さらに、情報提供者の情報は、WWW、電子メール、メーリングリスト、ニュースグループなどに限らず、たとえばGopher、ファイル転送、リモートログインなどのインターネット上で利用できる情報検索方法やサービス全般についても広く適用可能である。

【0084】また、インターネットに接続されているイントラネットに関しても適用可能であり、たとえばイン

トラネット内から発信される情報、イントラネット内で受信される情報についても同様の技術を適用することができる。

【0085】

【発明の効果】本願において開示される発明のうち、代表的なものによって得られる効果を簡単に説明すれば、以下のとおりである。

【0086】(1). 情報閲覧者が情報獲得クライアントプログラムをインストールして起動した際に、情報閲覧者が閲覧した閲覧情報を情報収集者のサーバーに獲得し、この獲得された閲覧情報を統計処理し、この統計処理された結果に基づいてインターネット上の詳細情報を情報収集者のサーバーに自動的に獲得することができるので、インターネット上において、より周知のない閲覧情報を、より詳細に収集することが可能となる。

【0087】(2). 前記(1)により収集した情報をもとに、自社のホームページを評価するにあたって、自社のページにアクセスした人が、他のどの会社のページをどれだけアクセスしたかなどを認識することが可能となる。

【0088】(3). 前記(1)により収集した情報をもとに、より具体的に、誰がどのページをどのくらい閲覧したか、情報提供者のインターネット上での競争相手はこの会社で、競争相手のホームページと比べて有利か不利か、ホームページのどこが問題でどこが長所か、より効率的なホームページにするにはどうしたらよいかなど、ホームページを開設している情報提供者にとって、より詳細な情報まで知ることが可能となる。

【0089】(4). 前記(1)により収集した情報の持っている特徴を考え、情報閲覧者は、情報提供者のページを見た人で、かつ何らかのプロモーションに引かれて閲覧情報の提供を引き受けている、つまり情報提供者の製品やサービスに興味を持っている集団であると判断でき、もっと言えば、この情報提供者のマーケットの一部であり、マーケットの動向を強く反映する集団であると判断することが可能となる。

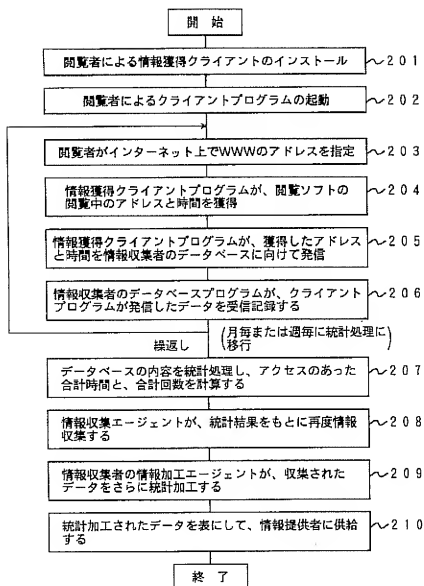
【0090】(5). 前記(1)により収集した情報の持っている特徴を考え、情報提供者にとっては、将来の顧客となるべきこれらの情報閲覧者の動向を把握することは、新製品やサービスの開発、投入、ダイレクトマーケティング（通信販売、ダイレクトメール）などに重要な役割を果たすものと認識することが可能となる。

【0091】(6). 前記(1)により収集した情報の持っている特徴を考え、インターネット上においては、情報提供者の競合相手が特定でき、さらに競合相手のホームページとの構成の違いを自動分析することで、ホームページの作成にマーケティングの趣向を持ち込むことができ、より情報閲覧者にとって魅力的なホームページの作成が可能になる。

【0092】(7). 前記(1)により収集した情報をもと

【図2】

図 2



【図5】

図 5

## 年齢別ランク

年齢別：合計アクセス回数、合計アクセス時間の上位3位—18未満（18～25，26～35，  
36～49，50～60，60以上）

順位	合計回数	アドレス	合計時間	アドレス
1	545回	http://www.fujitsu.com	4時間42分12秒	http://www.nec.com
2	423回	http://www.nec.com	3時間32分12秒	http://www.fujitsu.com
3	265回	http://www.apple.com	3時間17分21秒	http://www.apple.com

【図6】

図 6

## 性別ランク

性別：合計アクセス回数、合計アクセス時間の上位3位—男性（女性）

順位	合計回数	アドレス	合計時間	アドレス
1	545回	http://www.fujitsu.com	4時間42分12秒	http://www.toshiba.com
2	423回	http://www.nec.com	3時間32分12秒	http://www.panasonic.com
3	265回	http://www.apple.com	3時間17分21秒	http://www.fujitsu.com

【図9】

図 9

データベースの内容(電子メール)

ユーザ名	閲覧開始時間	閲覧終了時間	タイトル	発出人	日付
Jason	6/25/96 20:23:05	6/25/96 20:24:05	政治ニュース	seiji@seiji.com	6/24/96
Judy	6/26/96 08:11:11	6/26/96 08:12:05	スポーツニュース	sport@sport.com	6/24/96



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(51)Int.Cl.	<b>G06F 13/00</b>	<b>G06F 13/00</b>
	<b>G06F 12/00</b>	<b>G06F 17/30</b>
	<b>G06F 17/40</b>	

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(21)Application number : **09-196003** (71)Applicant : **HYPERTAC INC**

(22)Date of filing : **22.07.1997** (72)Inventor : **ONOE TAKUTARO**  
**KO GIU**

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(30)Priority

Priority number : **08210298** Priority date : **08.08.1996** Priority country : **JP**

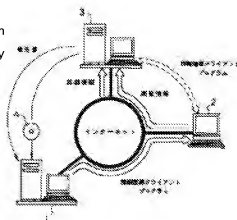
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**(54) METHOD FOR COLLECTING INFORMATION ON INTERNET AND STORAGE MEDIUM AND SYSTEM FOR COLLECTING INFORMATION**

(57)Abstract:

PROBLEM TO BE SOLVED: To allow an information provider to use detail information for the improvement of public information such as a WWW and electronic mail by automatically collecting the detail information based on the statistical processing result of the activity situation of an information reader.

SOLUTION: This network system is constituted of plural information provider servers 1, plural information reader clients 2, and information collector server 3 which are connected on an internet. Then, when the information reader reads the WWW of the information provider, and an information



obtaining client program is installed and activated, the read information of the URL and time of the WWW read by the information reader is obtained by the information

collector server 3. Then, the obtained read information is statistically processed for each access time, access number of times, sex, age group, and area. Then, detail information on the internet is automatically obtained by the information collector server 3 based on this statistically processed result.

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## CLAIMS

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[Claim(s)]

[Claim 1] In an Internet top to which two or more information providers' server, two or more information readers' client, and an information collection person's server are connected, It is an information collection method with which said two or more information readers acquire information to said information collection person's server based on an activity situation which perused two or more of said information providers' information, In order that either of said information readers may peruse one information of said information providers, when an information acquisition client program is installed and started, Information read which said information reader perused is acquired to said information collection person's server, An information collection method on the Internet carrying out the statistical work of this acquired information read, and acquiring detailed information on said Internet automatically to said information collection person's server based on this result by which the statistical work was carried out.

[Claim 2] It is an information collection method on the Internet according to claim 1, and said information provider's information is WWW, An information collection method on the Internet as for which gaining URL of said WWW, and time to said information collection person's server as said information reader's information read, and an access time exception and an access frequency exception carrying out the statistical work of this acquired information read a sex and age group exception and according to the area.

[Claim 3] Are an information collection method on the Internet according to claim 1, and said information provider's information An E-mail, Are a mailing list and a newsgroup and as said information reader's information read Said E-mail, An information collection method on the Internet as for which gaining a mailing list, a title of a newsgroup, the sender, time, and time to said information collection person's server, and an inspection time exception and a number-of-times exception of an inspection carrying out the statistical work of this acquired information read a sex and

age group exception and according to the area.

[Claim 4]Are an information collection method on the Internet according to claim 1, and said detailed information, The number of pages, the number of links, the number of words, the number of characters, a kind of font, size of a font, An information collection method on the Internet being a front number, the number of graphics, a graphic area rate, the number of image maps, an image map area rate, the number of AVI files, the number of wave files, a kind of background, and a color of a background and a kind of plug-in.

[Claim 5]An information collection method on the Internet which is an information collection method on the Internet according to claim 1, and is characterized by supplying said result of having carried out the statistical work, and detailed information on said Internet based on this statistical work result to said applicable information provider.

[Claim 6]In an Internet top to which two or more information providers' server, two or more information readers' client, and an information collection person's server are connected, It is a storage which memorizes an information acquisition client program for said two or more information readers to acquire information to said information collection person's server based on an activity situation which perused two or more of said information providers' WWW, A process of acquiring URL of said information provider's WWW which said information reader perused, and information read of time to said information collection person's server, A process that an access time exception and an access frequency exception carry out the statistical work of this acquired information read a sex and age group exception and according to the area, A process of acquiring detailed information on said Internet to said information collection person's server based on this result by which the statistical work was carried out is memorized, An information acquisition client program of this storage is written in said information provider's server, or said information collection person's server, A storage performing automatically even a process of acquiring said detailed information from a process of acquiring said information read when said information acquisition client program is installed and started, in order that either of said information readers may peruse one WWW of said information providers.

[Claim 7]In an Internet top to which two or more information providers' server, two or more information readers' client, and an information collection person's server are connected, Said two or more information readers Two or more of said information providers' E-mail, a mailing list, It is a storage which memorizes an information acquisition client program for acquiring information to said information collection

person's server based on an activity situation which perused a newsgroup, Said information provider's E-mail which said information reader perused, a mailing list, a title of a newsgroup, the sender, time, and a process of acquiring information read of time to said information collection person's server, A process that an inspection time exception and a number-of-times exception of an inspection carry out the statistical work of this acquired information read a sex and age group exception and according to the area, A process of acquiring detailed information on said Internet to said information collection person's server based on this result by which the statistical work was carried out is memorized, Write an information acquisition client program of this storage in said information provider's server, or said information collection person's server, and either of said information readers One E-mail of said information providers, a mailing list, A storage performing automatically even a process of acquiring said detailed information from a process of acquiring said information read when said information acquisition client program is installed and started, in order to peruse a newsgroup.

[Claim 8] On the Internet to which two or more information providers' server characterized by comprising the following and two or more information readers' client are connected.

A means to be an information collection system with which said two or more information readers acquire information based on an activity situation which perused two or more of said information providers' WWW, and to acquire URL of said information provider's WWW which said information reader perused, and information read of time.

A means to save this acquired information read.

A means by which an access time exception of this saved information read and an access frequency exception acquire detailed information on said Internet based on a statistical work result a sex and age group exception and according to area.

[Claim 9] On the Internet to which two or more information providers' server characterized by comprising the following and two or more information readers' client are connected.

Said two or more information readers Two or more of said information providers' E-mail, a mailing list, A means to be an information collection system which acquires information based on an activity situation which perused a newsgroup, and to acquire said information provider's E-mail which said information reader perused, a mailing list, a title of a newsgroup, the sender, time, and information read of time.

A means to save this acquired information read.

A means by which an inspection time exception of this saved information read and a number-of-times exception of an inspection acquire detailed information on said Internet based on a statistical work result a sex and age group exception and according to area.

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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention]An information reader especially this invention about the information gathering art on the Internet An information provider's WWW (World Wide Web). When an information acquisition client program original when perusing an E-mail, a mailing list, a newsgroup, etc. is installed and started, It applies to the information collection method on the suitable Internet for collection of the detailed information on the Internet based on this information reader's activity situation, a storage, and an information collection system, and is related with effective art.

[0002]

[Description of the Prior Art]For example, in the Internet according to a computer network as art which the artificer examined, Two or more information providers' server and two or more information readers' client are connected on this Internet, When an information reader specifies URL (Uniform Resource Locator) equivalent to the address of an information provider's WWW considered as a request, Service of an E-mail, a newsgroup, etc. can be considered further and the informational service which can peruse this information provider's WWW, and the Internet which can use such service are used by various usage patterns as multimedia communication.

[0003]

[Problem(s) to be Solved by the Invention]By the way, in the art about the informational service on the above Internet, In the information provider side an information reader by one of these of what can peruse WWW of the information provider who wants by specifying URL, The access situation by an information reader is just going to be worrisome, and art of collecting this access frequency, the detailed information based on this, etc. are desired from between information providers.

[0004]For example, the method of calculating the number of clicks of the homepage by an information reader as an audience rating survey of the Internet in recent years, The market research method by a questionnaire, etc. can be considered and it is

investigation of [ how many times the former is clicked in what page ], The latter questions impressive page, company, etc. by a questionnaire, and serves as the situation where detailed information can draw neither.

[0005]Then, this invention person notes recording the activity situation on the Internet of the information reader who is perusing WWW on the Internet using a browser, After carrying out the statistical work of these recorded data of all the, in order to collect the information on the Internet based on statistic results further, it found out becoming possible with software about the method of transmitting URL perused automatically.

[0006]By namely, the thing for which the original program which transmits URL perused automatically is considered, and this program is started. After an address, age, and sex are found, actually follow which page and Between, Investigation by statistics what page to have read is conducted, and the page etc. which do not remain in the impression which was not able to be further known by a questionnaire make it possible to draw the detailed information which is not acquired in the number counting method of clicks, or the market research method by a questionnaire.

[0007]Then, when the purpose of this invention installs an original information acquisition client program and an information reader starts it, It is in providing the information collection method on the Internet which can collect the detailed information on the Internet automatically based on the statistical work result of this information reader's activity situation, a storage, and an information collection system.

[0008]These statistical work results and the collected detailed information can be supplied to an applicable information provider, and the information gathering art on the Internet which an information provider can use for an improvement of the information read of WWW etc. can be provided.

[0009]Besides the pull type information on WWW, also about information, including push type information, including an E-mail, a mailing list, etc., a newsgroup, etc. Based on a statistical work result, the detailed information on the Internet can be collected automatically in a similar manner, and the information gathering art on the Internet which can be further used for an improvement of an information provider's information read etc. is provided.

[0010]The other purposes and the new feature will become clear from description and the accompanying drawing of this Description along [ said ] this invention.

[0011]

[Means for Solving the Problem]It will be as follows if an outline of a typical thing is briefly explained among inventions indicated in an application concerned.

[0012]Namely, an information collection method on the Internet of this invention, In an Internet top to which two or more information providers' server, two or more information readers' client, and an information collection person's server are connected, It is what is applied to a way an information reader acquires information to an information collection person's server based on an activity situation which perused an information provider's WWW. When an information acquisition client program is installed when an information reader peruses an information provider's WWW, and it starts, URL of WWW which an information reader perused, and information read of time are acquired to an information collection person's server, An access time exception and an access frequency exception carry out the statistical work of this acquired information read a sex and age group exception and according to the area, and detailed information on the Internet is automatically acquired to an information collection person's server based on this result by which the statistical work was carried out.

[0013]Especially detailed information The number of pages, the number of links, the number of words, the number of characters, a kind of font, Size of a font, a front number, the number of graphics, a graphic area rate, the number of image maps, An image map area rate, the number of AVI (Audio Video Interleave) files, A result which are the number of wave files, a kind of background, and a color of a background and a kind of plug-in and as for which an access time exception and an access frequency exception carried out the statistical work a sex and age group exception and according to the area further, Detailed information on the Internet based on this statistical work result is supplied to an applicable information provider.

[0014]Information read currently collected with the number counting method of clicks, a market research method by a questionnaire, etc. can be automatically collected by an information acquisition client program by this, and information read which does not have a bias more can be obtained more in details by this automatic collection. In evaluating a homepage of its company, a standard had only the number of clicks, and the accessed number of people, but it comes to understand of other companies of which a person who accessed a page of his company accessed a page by using this information acquisition client program only in which.

[0015]A storage of this invention is what is applied to a storage which memorizes an information acquisition client program for an information reader to acquire information to an information collection person's server based on an activity situation which perused an information provider's WWW, A process of acquiring URL of an information provider's WWW which an information reader perused, and information read of time to

an information collection person's server, A process that an access time exception and an access frequency exception carry out the statistical work of this acquired information read a sex and age group exception and according to the area, A process of acquiring detailed information on the Internet to an information collection person's server based on this result by which the statistical work was carried out is memorized, and an information acquisition client program of this storage is written in an information provider's server or an information collection person's server.

[0016]Only by this writing an information acquisition client program memorized by storage in an information provider's server or an information collection person's server, When an information acquisition client program is installed when an information reader peruses an information provider's WWW, and it starts, even a process of acquiring detailed information from a process of acquiring information read can be performed automatically.

[0017]An information collection system on the Internet of this invention, A means to acquire URL of an information provider's WWW which an information reader perused, and information read of time, According to a means to save this acquired information read, and access time of this saved information read, An access frequency exception connects to the Internet a server of an information collection person who has a means to acquire detailed information on the Internet based on a statistical work result a sex and age group exception and according to area.

[0018]By this by connecting an information collection person's server on the Internet in addition to two or more information providers' server, and two or more information readers' client. When an information acquisition client program is installed when an information reader peruses an information provider's WWW, and it starts, Information read is acquired by an acquisition means of information read, it can save at a preserving means of information read, and detailed information on the Internet can be automatically acquired by an acquisition means of detailed information based on a statistical work result of this information read.

[0019]By the above information gathering art, more concretely, who perused how many which pages, or a competitor on an information provider's Internet in what company. Advantageous compared with a competitor's homepage, disadvantageous or where of a homepage becomes that it got to know to more detailed information for an information provider who has opened a homepage whether what I should do for where to use the strong point and a more efficient homepage on a problem.

[0020]An information collection method on the Internet of everything but this invention, a storage, and an information collection system, It is what is applied to art in



which an information reader acquires information to an information collection person's server based on an activity situation which perused an information provider's E-mail, a mailing list, and a newsgroup, When an information acquisition client program is installed when an information reader peruses an information provider's E-mail, a mailing list, and a newsgroup, and it starts, An E-mail which an information reader perused, a mailing list, a title of a newsgroup, Acquire the sender, time, and information read of time to an information collection person's server, and this acquired information read According to inspection time, A number-of-times exception of an inspection carries out a statistical work a sex and age group exception and according to the area, and detailed information on the Internet is automatically acquired to an information collection person's server based on this result by which the statistical work was carried out.

[0021]Besides pull type information on WWW of a homepage, by this also about information, including push type information, including an E-mail, a mailing list, etc., a newsgroup, etc. Based on a statistical work result, detailed information on the Internet can be collected automatically in a similar manner, and it can use for an improvement of an information provider's information read etc. further.

[0022]

[Embodiment of the Invention]Hereafter, an embodiment of the invention is described in detail based on Drawings.

[0023](Embodiment 1) The outline lineblock diagram in which drawing 1 shows the network system on the Internet which is the 1 embodiment of this invention, The flow chart which shows an example of the procedure according [ drawing 2 ] to an information acquisition client program, the explanatory view in which drawing 3 shows an example of the contents of the database, drawing 4 - drawing 7 are the explanatory views showing examples, such as statistic results attached to a report, respectively.

[0024]First, drawing 1 explains the outline composition of the network system on the Internet of this embodiment.

[0025]The network system on the Internet of this embodiment comprises two or more information providers' server 1 connected, for example on the Internet, two or more information readers' client 2, and the information collection person's server 3. In drawing 1, the example to which the server 1 per information provider and the information reader's client 2 are connected, respectively for simplification of a network system is shown.

[0026]An information provider's server 1 consists of a computer which provides information according to an information reader's demand in the form of WWW on the

Internet, The license of the information acquisition client of information read is received from an information collection person, While sticking a link on the homepage of others which register this on WWW of their company or in which an information acquisition client exists and enabling installation of an information acquisition client to an information reader, Processing from acquisition of the information read based on information acquisition client software is enabled.

[0027]It is possible for it to be connected to WWW on the Internet, and for an information reader's client 2 to consist of a computer holding WWW inspection software, and to peruse an information provider's WWW by specification of URL corresponding to an information provider's WWW.

[0028]The database which an information collection person's server 3 acquires URL of an information provider's WWW which the information reader perused, and the information read of time, and is saved, While the access time exception of this information read and an access frequency exception newly acquire the detailed information on the Internet based on the statistical work result a sex and age group exception and according to area, In order to supply these information to an information provider, it consists of a computer which has an agent program which processes a predetermined form, and it is connected on the Internet with an information provider's server 1 and the information reader's client 2.

[0029]In the network system constituted as mentioned above, An information collection person's server 3 connected to the Internet, and the software of the information acquisition client lent from an information collection person with a license to an information provider, That is, the information collection system on the Internet comprises the storage 4 with which the information acquisition client program was memorized.

[0030]Next, the procedure of the information collection method on the Internet is explained about an operation of this embodiment based on [drawing 2.](#)

[0031]In this case, the information acquisition client program which is licensed from an information collection person, for example, is stored in the storages 4, such as CD-ROM, shall be beforehand written in an information provider's server 1. This information acquisition client program is an information collection person's original program, and the procedure which performs information gathering on the Internet automatically is memorized by this information acquisition client program.

[0032](1) In the . step 201, an information reader installs in his own computer the information acquisition client program currently written in the information provider's server 1. In this case, the Internet top is automatically transmitted to an information

acquisition client program by an information provider's server 1.

[0033]It writes in an information provider's server 1, and also this information acquisition client program can also be written in an information collection person's server 3, and it is also possible to receive from an information collection person's server 3 in this case. Installation of this information acquisition client program can be performed automatically intentionally or unconsciously.

[0034](2) In the . step 202, an information reader starts an information acquisition client program. In this case, if a program is started intentionally, for example or this page is seen, an information acquisition client program will be received automatically. It is possible to start automatically unconsciously to peruse [ what is called a POS (Point Of Start) page started ] etc.

[0035](3) In the . step 203, an information reader specifies the address of an information provider's WWW considered as a request on the Internet. The address of this WWW is called URL and generally The address of a homepage, Since it is called a HTTP (Hyper Text Transfer Protocol) address etc., it specifies, when inspection software is used and an information reader peruses the homepage of WWW.

[0036](4) In the . step 204, the information acquisition client program installed in the computer of an information reader's client 2 gains the address and time under inspection of inspection software. That is, inspection software is used and an information acquisition client program acquires the address specified by an information reader, and its designated time.

[0037](5) In the . step 205, an information acquisition client program turns to information collection person's server's 3 database the information read of the address gained by the information reader's inspection, and time, and sends it.

[0038](6) In the . step 206, information collection person's server's 3 database program receives the information read of the address which the information acquisition client program sent, and time, and records on a database. Here, information read is moved and saved in information collection person's server's 3 database from the computer of an information reader's client 2.

[0039]In this database, as an example is shown, for example in drawing 3, a user name, access time, and URL (address) correspond, and are saved. It turns out that the information reader of Jason as an example accessed <http://www.fujitsu.com> at 19:59 10 seconds on June 25, 1996.

[0040]After processing of this step 206 is completed, the processing from Step 203 is repeated to the address of all the information providers' WWW specified by an information reader. All the information read by an information reader's addressing is

acquired, and processing which saves this information read in information collection person's server's 3 database further is performed, and after saving all the information read in a database for every month or every week, it shifts to subsequent steps.

[0041](7) In the . step 207, an information collection person's server 3 does the statistical work of the contents of the information read of the address saved in the database, and time. That is, a sex and age group exception and a local exception calculate total time and the total number of times with access in the comprehensive sum total etc.

[0042]As an example is shown, for example in drawing 4 (a) and (b), this statistical work, The perused time, corresponding to the perused number of times, URL, the sum total inspection time corresponding to it, and the number of times of a sum total inspection are ranked and processed, and all are calculated [ a sex and age group exception and local exception ] by dividing them into the comprehensive sum total etc. by order with respectively long time, and order with much number of times.

[0043]URL with the perused longest time as an example is 30 hours, 15 minutes, 45 seconds in <http://www.fujitsu.com>, and it turns out that URL with most perused number of times is 545 times in <http://www.fujitsu.com>.

[0044](8) In the . step 208, information collection person's server's 3 information gathering agent program collects the detailed information on the Internet again based on a statistical work result. This information gathering agent program acquires detailed information automatically about the page which is popular, for example, the page which is not, etc., and records it on a database.

[0045]This detailed information, for example The number of pages, the number of links, the number of words, the number of characters, the kind of font, The size of a font, a front number, the number of graphics, a graphic area rate, the number of image maps, An image map area rate, the number of AVI files, the number of wave files, the kind of background, It is a color of a background, a kind of plug-in, etc., and an image map means the graphics on which the link is stuck, an AVI file shows the file of an image, and a wave file shows a musical file, respectively, and plug-in means special expansion.

[0046](9) In the . step 209, information collection person's server's 3 information processing agent program carries out statistics processing of the collected information further. That is, the statistical work of the collected information is carried out, and a predetermined tabular format is used, or the form corresponding to an information provider's demand is processed, and it outputs to it.

[0047](10) In the . step 210, an information provider is supplied by using as a report the information by which statistics processing was carried out. Judging [ or ] whether

the homepage of an information provider's WWW is efficient or inefficient based on the collected information at this time, it can improve how or the competitor on the Internet summarizes someone etc. in a report.

[0048]This report is compiled as a surfer pursuit report etc., for example as an example, 1. tendency 3. of outline 1. purpose 2. this month -- the 3rd place of a higher rank 3 place 4. sex higher rank with the result of comparative-analysis 4. this month of definite 2. menu page of the introduction 1. competition partner of 3. competition site, and the whole. [ report matter 2. statistics 1. access time 2. access frequency 3. age exception ] problem 3. of point 2. this month improved from the proposal 1. previous month -- the proposal for a better site -- it can create by the above items.

[0049]for example, the ranking by the sum total access time according to a comprehensive rank as an example of the data of 2. statistics and the ranking (drawing 4 (a).) by the sum total access frequency by a comprehensive rank (b) -- 36 years old - 49 years old 26 years old - 35 years old 18 years old - 25 years old less than 18 years old, The 3rd [ top ] place (drawing 6), the sum total access frequency by ranks according to age, such as 50 years old - 60 years old, and aged 60 and over, the sum total access frequency by the sex rank of the 3rd [ top ] place (drawing 5) of time, a male, and a woman, and time, is summarized to a tabular format, respectively. In addition, sum total access frequency, time, etc. by the rank according to area can be reported as data.

[0050]As an example of the data of the comparative analysis of menu page \*\*\*\*\* for introduction of 3. competition site, as shown, for example in drawing 7, About detailed information, such as a color of the number of pages, the number of links, the number of words, the number of graphics, a graphic area rate, the number of image maps, an image map area rate, AVI, the number of wave files, and a background, The comparative analysis about your menu page, the menu page of the other company, your whole site, the whole site of the other company, etc. is reported.

[0051]And based on the contents about the item of introduction of above 1. outlines, 2. statistics, and 3. competition site as the result and proposal of 4. this month, 1. the point improved from the previous month, the problem of 2. this month, and 3. -- the proposal for a better site, etc. can be proposed from an information collection person to an information provider.

[0052]As mentioned above, based on the procedure of an information acquisition client program, URL of WWW which the information reader perused, and the information read of time are acquired in an information collection person's database. An access time exception and an access frequency exception can carry out the

statistical work of this acquired information read a sex and age group exception and according to the area, and the detailed information on the Internet can be automatically acquired in an information collection person's database based on this result by which the statistical work was carried out.

[0053]By therefore, automatic acquisition of the information by this information acquisition client program. In being able to obtain more the information read which does not have a bias more in details, and evaluating the homepage of its company, of other companies of which the person who accessed the page of his company having accessed the page only in which, and detailed information come to be known.

[0054]By the above, more concretely, who perused how many which pages, or the competitor on an information provider's Internet in what company. Advantageous compared with a competitor's homepage, disadvantageous or where of a homepage becomes that it got to know to more detailed information for the information provider who has opened the homepage whether what I should do for where to use the strong point and a more efficient homepage on a problem.

[0055]Therefore, according to the network system on the Internet of this embodiment. In addition to an information provider's server 1 and an information reader's client 2, an information collection person's server 3 is connected on the Internet. Only by writing the original information acquisition client program memorized by the storage 4 in an information provider's server 1 or an information collection person's server 3, When an information acquisition client program is installed when an information reader peruses an information provider's WWW, and it starts, information read can be acquired and saved and the detailed information on the Internet can be automatically acquired based on the statistical work result of this information read.

[0056]By and the thing for which statistics processing is carried out and such detailed information is supplied to an information provider as a report at a predetermined form. An information provider uses a report for an improvement of the information read of WWW etc., and since the access time by an information reader and access frequency are increased, he can improve the information read of WWW by better composition and the contents.

[0057](Embodiment 2) In the network system on the Internet which is an embodiment of everything [ drawing 8 ] but this invention, The flow chart which shows an example of the procedure by an information acquisition client program, the explanatory view in which drawing 9 shows an example of the contents of the database, drawing 10 - drawing 12 are the explanatory views showing examples, such as statistic results attached to a report, respectively.

[0058]The network system on the Internet of this embodiment, Two or more information providers' server 1 connected on the Internet like said Embodiment 1, Comprise two or more information readers' client 2, and an information collection person's server 3, and the point of difference with said Embodiment 1, It is the point which replaces an information provider's information with pull type information, including WWW etc., and was applied to information, including push type information, including an E-mail, a mailing list, etc., a newsgroup, etc.

[0059]An information reader in this embodiment Namely, an information provider's E-mail, In order to peruse a mailing list, a newsgroup, etc., when an information acquisition client program is installed and started, The title of these information that the information reader perused, the sender, time, time, etc. are gained to an information collection person's server, An inspection time exception and the number-of-times exception of an inspection carry out the statistical work of this acquired information read a sex and age group exception, according to the area, etc., and the detailed information on the Internet is automatically acquired to an information collection person's server based on this result by which the statistical work was carried out.

[0060]Next, the procedure of the information collection method on the Internet is explained about an operation of this embodiment based on drawing 8. Detailed explanation is omitted about the same step as the procedure of said Embodiment 1 (drawing 2).

[0061](1) In Step 801, an information reader installs in his own computer the information acquisition client program currently written in the information provider's server 1 like the . aforementioned embodiment 1.

[0062](2) In Step 802, an information reader starts an information acquisition client program like the . aforementioned embodiment 1.

[0063](3) In the . step 803, an information reader peruses an information provider's E-mail considered as a request on the Internet, a mailing list, a newsgroup, etc.

[0064](4) In the . step 804, the information acquisition client program installed in the computer of an information reader's client 2 acquires information read, such as a title, the sender, time, time, and the number of characters, from inspection software. That is, inspection software, such as electronic mail software, is used and an information acquisition client program acquires the information which the information reader is perusing.

[0065](5) In the . step 805, an information acquisition client program turns to information collection person's server's 3 database information read acquired by the

information reader's inspection, such as a title, the sender, time, time, and the number of characters, and sends it.

[0066](6) In the . step 806, information collection person's server's 3 database program receives information read, such as a title which the information acquisition client program sent, the sender, time, time, and the number of characters, and records on a database. Here, information read is moved and saved in information collection person's server's 3 database from the computer of an information reader's client 2.

[0067]In this database, as an example is shown, for example in drawing 9, a user name, inspection time of onset, inspection end time, a title, the sender, and a date correspond, and are saved. It turns out that the information reader of Jason as an example perused the political news of seiji@seiji.com presented on June 24, 1996 from 20:23 05 seconds on June 25, 1996 to 20:24 05 seconds.

[0068]All the information providers' E-mail which the information reader specified after processing of this step 806 was completed, The processing from Step 803 is repeated to a mailing list, a newsgroup, etc., All the information read by an information reader's specification is acquired, and processing which saves this information read in information collection person's server's 3 database further is performed, and after saving all the information read in a database for every month or every week, it shifts to subsequent steps.

[0069](7) In the . step 807, an information collection person's server 3 does the statistical work of the contents of information read, such as a title saved in the database, the sender, time, time, and the number of characters. That is, a sex and age group exception and a local exception calculate the total time and the total number of times which were perused in the comprehensive sum total etc.

[0070]As an example is shown, for example in drawing 10 (a) and (b), this statistical work, The perused time, corresponding to the perused number of times, a title, the sum total inspection time corresponding to it, and the number of times of a sum total inspection are ranked and processed, and all are calculated [ a sex and age group exception and local exception ] by dividing them into the comprehensive sum total etc. by order with respectively long time, and order with much number of times.

[0071]The news of the title with the perused longest time as an example is 3 hours, 03 minutes, 12 seconds by political news, and it turns out that the news of a title with most perused number of times is 312 times by political news.

[0072](8) In Step 808, information collection person's server's 3 information gathering agent program collects the detailed information on the Internet again based on a statistical work result like the . aforementioned embodiment 1. This information



gathering agent program acquires detailed information automatically about the news of the title which is popular, for example, the news of the title which is not, etc., and records it on a database.

[0073](9) In Step 809, information collection person's server's 3 information processing agent program carries out statistics processing of the collected information further like the . aforementioned embodiment 1. That is, the statistical work of the collected information is carried out, and a predetermined tabular format is used, or the form corresponding to an information provider's demand is processed, and it outputs to it.

[0074](10) In the . step 810, an information provider is supplied by using as a report the information by which statistics processing was carried out. Judging [ or ] whether an information provider's E-mail, a mailing list, a newsgroup, etc. are efficient or inefficient based on the collected information at this time, it can improve how or the competitor on the Internet summarizes someone etc. in a report.

[0075]for example, the ranking by the sum total inspection time according to a comprehensive rank as an example of statistical data and the ranking (drawing 10 (a)) by the number of times of a sum total inspection by a comprehensive rank (b) — the 5th [ top ] place (drawing 12) of the number of times of a sum total inspection by ranks according to age, such as 25 years old – 36 etc. years old, the number of times of a sum total inspection by the sex rank of the 5th [ top ] place (drawing 11) of time, a male, and a woman, and time is summarized to a tabular format, respectively. In addition, sum total access frequency, time, etc. by the rank according to area can be reported as data.

[0076]As mentioned above, based on the procedure of an information acquisition client program, Titles which the information reader perused, such as an E-mail, a mailing list, and a newsgroup, Information read, such as the sender, time, time, and the number of characters, is acquired in an information collection person's database, An inspection time exception and the number-of-times exception of an inspection can carry out the statistical work of this acquired information read a sex and age group exception and according to the area, and the detailed information on the Internet can be automatically acquired in an information collection person's database based on this result by which the statistical work was carried out.

[0077]By therefore, automatic acquisition of the information by this information acquisition client program. Can obtain more the information read which does not have a bias more in details, and The E-mail of its company, In evaluating a mailing list, a newsgroup, etc., of other companies of which the person who perused the information

on the push type of his company having perused information only in which, and detailed information come to be known.

[0078]By the above, more concretely, who perused how many which information, or the competitor on an information provider's Internet in what company. Advantageous compared with a competitor's information, disadvantageous or where of information becomes that it got to know to more detailed information for the information provider who has established information whether what I should do for where to use the strong point and more efficient information on a problem.

[0079]Therefore, according to the network system on the Internet of this embodiment. In addition to an information provider's server 1 and an information reader's client 2, an information collection person's server 3 is connected on the Internet. Only by writing the original information acquisition client program memorized by the storage 4 in an information provider's server 1 or an information collection person's server 3, When an information acquisition client program is installed when an information reader peruses an information provider's E-mail, a mailing list, a newsgroup, etc., and it starts, Information read can be acquired and saved and the detailed information on the Internet can be automatically acquired based on the statistical work result of this information read.

[0080]By and the thing for which statistics processing is carried out and such detailed information is supplied to an information provider as a report at a predetermined form. An information provider uses a report for an improvement of information read, such as an E-mail, a mailing list, and a newsgroup, etc., and since the inspection time by an information reader and the number of times of an inspection are increased, he can improve information read by better composition and the contents.

[0081]As mentioned above, although the invention made by this invention person was concretely explained based on the embodiments of the invention 1 and 2, it cannot be overemphasized that it can change variously in the range which this invention is not limited to said embodiment and does not deviate from the gist.

[0082]For example, about the detailed information collected based on a statistical work result. what is limited to the information shown in the above-mentioned -- not but -- in addition, the size of a page. It can apply widely also to the size of graphics, the position of graphics, the size of graphics, the number of graphs, the number of links (inside of the company's site), and the number of links (outside of the company's site), and such detailed information can acquire required various information according to an information provider's demand etc.

[0083]An information provider's information is widely [ about the service / WWW, an

E-mail, a mailing list, not only a newsgroup, etc. but at large / an information retrieval method or at large which can be used, for example on the Internet, such as Gopher, a file transfer, and remote login, ] applicable.

[0084]Art with the same said of the information which can apply also about the intranet connected to the Internet, for example, is disseminated out of intranet, and the information received in intranet is applicable.

[0085]

[Effect of the Invention]It will be as follows if the effect acquired by the typical thing among the inventions indicated in an application concerned is explained briefly.

[0086](1) when . information reader installed and starts an information acquisition client program, Acquire the information read which the information reader perused to an information collection person's server, and the statistical work of this acquired information read is carried out, Since the detailed information on the Internet can be automatically acquired to an information collection person's server based on this result by which the statistical work was carried out, it becomes possible to collect more the information read which does not have a bias more on the Internet in details.

[0087](2) In evaluating the homepage of its company based on the information collected with . above (1), it enables the person who accessed the page of his company to recognize which accessed the page of other companies of which.

[0088](3) Based on the information collected with . above (1), who perused how many which pages more concretely, or the competitor on an information provider's Internet in what company. Advantageous compared with a competitor's homepage, disadvantageous or where of a homepage becomes that it got to know to more detailed information for the information provider who has opened the homepage whether what I should do for where to use the strong point and a more efficient homepage on a problem.

[0089](4) Consider the feature which the information collected with . above (1) has, and an information reader, If are the person who looked at the information provider's page, and it was pulled to a certain promotion, and offer of information read is taken over, that is, it can judge that it is the group which is interested in an information provider's product or service and it says more, It is a part of this information provider's market, and it becomes possible to judge that it is a group which reflects the trend of a market strongly.

[0090](5) Consider the feature which the information collected with . above (1) has, and for an information provider, It becomes possible [ recognizing as playing a role important for development of a new product or service, an injection, direct marketing

(a mail order, direct mail), etc. ] to grasp the trend of these information readers that should become a future customer.

[0091](6) In [ consider the feature which the information collected with . above (1) has, and ] the Internet top, An information provider's competition partner can specify, by \*\*\*\*\* the difference in composition with a competition partner's homepage further, the idea of marketing can be brought to creation of a homepage and creation of the more attractive homepage for an information reader is attained.

[0092](7) Also in the case where the E-mail of their company, a mailing list, a newsgroup, etc. are evaluated based on the information collected with . above (1), Above (2) Evaluation and recognition are attained like - (6), and Competitor, It becomes possible [ the improvement to an efficiency target, etc. ] for advantageous/disadvantage by comparison with a competitor, demerit/the strong point, and the information provider that provides an E-mail, a mailing list, a newsgroup, etc. more to get to know to more detailed information.

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## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is an outline lineblock diagram showing the network system on the Internet which is the 1 embodiment of this invention.

[Drawing 2] In the 1 embodiment of this invention, it is a flow chart which shows an example of the procedure by an information acquisition client program.

[Drawing 3] In the 1 embodiment of this invention, it is an explanatory view showing an example of the contents of the database.

[Drawing 4] (a) and (b) are the explanatory views showing an example of the statistic results (access time, access frequency) attached to a report in the 1 embodiment of this invention.

[Drawing 5] In the 1 embodiment of this invention, it is an explanatory view showing an example of the statistic results (according to age) attached to a report.

[Drawing 6] In the 1 embodiment of this invention, it is an explanatory view showing an example of the statistic results (sex) attached to a report.

[Drawing 7] In the 1 embodiment of this invention, it is an explanatory view showing an example of the statistic results (a menu page and the whole comparative analysis) attached to a report.

[Drawing 8] In the network system on the Internet which is other embodiments of this invention, it is a flow chart which shows an example of the procedure by an

information acquisition client program.

[Drawing 9] In other embodiments of this invention, it is an explanatory view showing an example of the contents of the database.

[Drawing 10] (a) and (b) are the explanatory views showing an example of the statistic results (inspection time, number of times of an inspection) attached to a report in other embodiments of this invention.

[Drawing 11] In other embodiments of this invention, it is an explanatory view showing an example of the statistic results (according to age) attached to a report.

[Drawing 12] In other embodiments of this invention, it is an explanatory view showing an example of the statistic results (sex) attached to a report.

[Description of Notations]

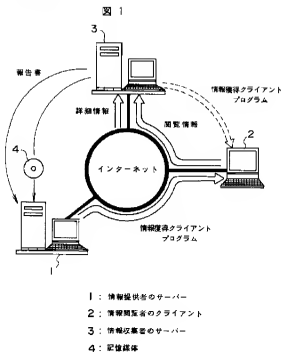
- 1 An information provider's server
- 2 An information reader's client
- 3 An information collection person's server
- 4 Storage

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## DRAWINGS

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[Drawing 1]



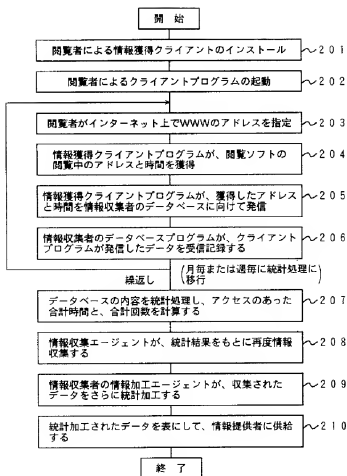
[Drawing 7]

図 7

メニューページ及び全体の比較分析

	貴社 メニューページ	他社 メニューページ	貴社 サイト全体	他社 サイト全体
ページ数	...	...	582	724
リンク数	32	7	3214	1257
単語数	632	125	5432	4325
グラフィック数	4	12	78	124
グラフィック埋め込み率	12%	43%	8%	32%
イメージマップ数	2	8	47	84
イメージマップ埋め込み率	7%	8%	6%	10%
AVI,ウェーブファイル数	0	1	7	41
バックグラウンドの色	白	黒	...	...

図 2



[Drawing 2]

[Drawing 3]

図 3

データベースの内容

ユーザ名	アクセス時間	URL (アドレス)
Jason	06/25/96 19:59:10	http://www.fujitsu.com
Judy	06/27/96 10:12:05	http://www.hypertak.com

図 4

総合ランク

(a)  
合計アクセス時間による順位

順位K	合計時間	アドレス
1	30時間15分45秒	http://www. fujitsu. com
2	24時間12分 6 秒	http://www. nec. com
3	22時間19分37秒	http://www. apple. com
4	7 時間45分58秒	http://www. toshiba. com
5	3 時間32分12秒	http://www. hp. com

(b)  
合計アクセス回数による順位

順位K	合計回数	アドレス
1	545回	http://www. fujitsu. com
2	423回	http://www. nec. com
3	265回	http://www. apple. com
4	198回	http://www. toshiba. com
5	14回	http://www. hp. com

[Drawing 4]

[Drawing 10]

図 10

(a)

閲覧時間による順位

順位	合計時間	タイトル
1	8時間39分12秒	政治ニュース
2	2時間23分34秒	ABC新聞ニュース
3	2時間07分23秒	スポーツニュース
4	1時間46分34秒	XYZ日刊ニュース
5	97分55秒	経済ニュース

(b)

閲覧回数による順位

順位	合計回数	タイトル
1	312回	政治ニュース
2	276回	XYZ日刊ニュース
3	213回	スポーツニュース
4	176回	ABC新聞ニュース
5	49回	経済ニュース



[Drawing 11]

図 11

年齢別ランキング

性別別 合計閲覧回数、合計閲覧時間の上位5位 - 25才 ~ 35才

順位	合計閲覧回数	タイトル	合計閲覧時間	タイトル
1	361回	政治ニュース	3時間35分12秒	政治ニュース
2	284回	ABC新聞ニュース	2時間58分34秒	ABC新聞ニュース
3	264回	スポーツニュース	2時間07分23秒	経済ニュース
4	120回	XYZ日々ニュース	1時間46分34秒	スポーツニュース
5	45回	経済ニュース	37分55秒	XYZ日々ニュース

[Drawing 12]

図 12

性別ランキング

性別別 合計閲覧回数、合計閲覧時間の上位5位 - 女性

順位	合計閲覧回数	タイトル	合計閲覧時間	タイトル
1	331回	XYZ日々ニュース	3時間43分32秒	XYZ日々ニュース
2	235回	スポーツニュース	2時間25分34秒	ABC新聞ニュース
3	214回	ABC新聞ニュース	2時間14分23秒	経済ニュース
4	113回	政治ニュース	1時間14分34秒	スポーツニュース
5	58回	経済ニュース	32分45秒	政治ニュース

[Drawing 5]

☒ 5

年齢別ランク

年齢別：合計アクセス回数、合計アクセス時間の上位3位-18未満（18~25、26~35、

36~49、50~60、60以上）

順位	合計回数	アドレス	合計時間	アドレス
1	545回	<a href="http://www.fujitsu.com">http://www.fujitsu.com</a>	4時間42分12秒	<a href="http://www.nec.com">http://www.nec.com</a>
2	423回	<a href="http://www.nec.com">http://www.nec.com</a>	3時間32分12秒	<a href="http://www.fujitsu.com">http://www.fujitsu.com</a>
3	265回	<a href="http://www.apple.com">http://www.apple.com</a>	3時間17分21秒	<a href="http://www.apple.com">http://www.apple.com</a>

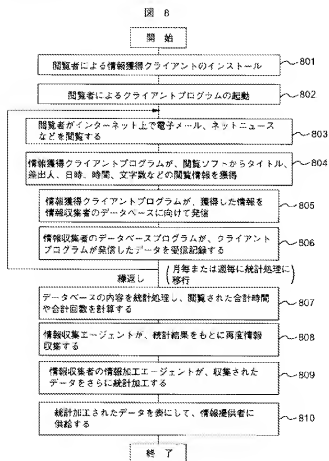
性別ランク

性別：合計アクセス回数、合計アクセス時間の上位3位—男性（女性）

順位	合計回数	アドレス	合計時間	アドレス
1	545回	http://www.fujitsu.com	4時間42分12秒	http://www.toshiba.com
2	423回	http://www.nec.com	3時間32分12秒	http://www.panasonic.com
3	285回	http://www.apple.com	3時間17分21秒	http://www.fujitsu.com

[Drawing 6]

[Drawing 8]



データベースの内容 (電子メール)

ユーザ名	閲覧開始時間	閲覧終了時間	タイトル	発出人	日付
Jason	6/25/96 20:23:05	6/25/96 20:24:05	技術ニュース	seiji@seiji.com	6/24/96
Judy	6/26/96 08:11:11	6/26/96 08:12:05	スポーツニュース	sport@sport.com	6/24/96